AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer-implemented method for buffering data in a multithreaded environment, comprising:

~~generating log data in response to a request for accessing a resource;~~

~~identifying a buffer management structure that is associated with a plurality of data buffers;~~

reading a ~~last~~ buffer index value that ~~is associated with the buffer management structure, wherein said last buffer index value provides information that~~ identifies a ~~last~~ data buffer that was last used for buffering data;

incrementing the buffer index value;

locating a buffer array entry that is associated with the buffer index value;

determining whether the buffer array entry indicates a particular value;

if the buffer array entry does not indicate the particular value, then attempting to obtain a lock on a particular data buffer that is associated with the buffer array entry; and

if the buffer array entry indicates the particular value, then incrementing the buffer index value.

~~selecting a data buffer that is associated with said buffer management structure based on said last buffer index value.~~

2. (Currently Amended) The method of Claim 1, further comprising:

if the attempt to obtain the lock on the particular data buffer succeeds, then updating the buffer array entry to indicate the particular value.~~maintaining a data structure that is associated with said plurality of data buffers, wherein the data structure is associated with a group of flags that provide an indication as to whether an entry in said data structure is likely to be associated with a data buffer that is available for storing said log data; and~~

~~prior to writing said log data, reading a flag associated with a particular data structure entry to determine whether said particular data structure entry is likely associated with a data buffer that is available for storing said log data.~~

3. (Currently Amended) The method of Claim 1, further comprising:

receiving a connection request from a client;

assigning a thread of execution to process said connection request; and

~~wherein the step of identifying a buffer management structure further comprises the step of said thread of execution~~ selecting ~~said~~ a particular buffer management structure from a plurality of buffer management structures, wherein said plurality of buffer management structures are each associated with a set of data buffers that are used for buffering data to a physical memory unit;

wherein the buffer index value is associated with the particular buffer management structure.

4. (Currently Amended) The method of Claim 1, ~~wherein~~further comprising:

generating log data in response to a request for accessing a resource, wherein said resource represents one or more sets of content that are associated with a network server; and

~~the step of identifying a buffer management structure comprises the step of~~ selecting ~~said~~ a buffer management structure based on one or more addresses in which said one or more sets of content are stored on said network server.

5-6. (Canceled)

7. (Currently Amended) The method of Claim 1, further comprising the step of writing ~~said~~ log data into said particular data buffer.

8-9. (Canceled)

10. (Currently Amended) The method of Claim 1, further comprising:
maintaining ~~said~~ a plurality of data buffers as an array of available buffers; and
in response to detecting that ~~a~~ the particular data buffer contains a particular limited amount of free data space, removing said particular data buffer from said array of available buffers.

11. (Original) The method of Claim 10, wherein the step of removing said particular data buffer from said array of available buffers further comprises linking said particular data buffer into a list of ready-to-write data buffers.

12. (Original) The method of Claim 11, further comprising:
removing said particular data buffer from said array of available buffers; and
storing on a non-volatile storage unit information contained in said particular data buffer.

13. (Currently Amended) The method of Claim 1, further comprising:
maintaining ~~said~~ a plurality of data buffers as an array of available buffers; and
~~wherein the step of selecting a data buffer that is associated with said buffer management structure comprises the step of:~~
in response to determining that no data buffer is available in said array of available buffers for storing said log data, requesting a free data buffer from a global list of free data buffers.

14-35. (Canceled)

36. (New) A computer-readable medium carrying one or more sequences of instructions for buffering data in a multithreaded environment, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform the steps of:

reading a buffer index value that identifies a data buffer that was last used for buffering data;

incrementing the buffer index value;

locating a buffer array entry that is associated with the buffer index value;

determining whether the buffer array entry indicates a particular value;

if the buffer array entry does not indicate the particular value, then attempting to obtain a lock on a particular data buffer that is associated with the buffer array entry; and

if the buffer array entry indicates the particular value, then incrementing the buffer index value.

37. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the steps of:

if the attempt to obtain the lock on the particular data buffer succeeds, then updating the buffer array entry to indicate the particular value.

38. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the steps of:

receiving a connection request from a client;

assigning a thread of execution to process said connection request; and

selecting a particular buffer management structure from a plurality of buffer management structures, wherein said plurality of buffer management structures are each associated with a set of data buffers that are used for buffering data to a physical memory unit;

wherein the buffer index value is associated with the particular buffer management structure.

39. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the steps of:

generating log data in response to a request for accessing a resource, wherein said resource represents one or more sets of content that are associated with a network server; and

selecting a buffer management structure based on one or more addresses in which said one or more sets of content are stored on said network server.

40. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the step of writing log data into said particular data buffer.

41. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the steps of:

maintaining a plurality of data buffers as an array of available buffers; and

in response to detecting that the particular data buffer contains a particular limited amount of free data space, removing said particular data buffer from said array of available buffers.

42. (New) The computer-readable medium of Claim 41, wherein the step of removing said particular data buffer from said array of available buffers further comprises linking said particular data buffer into a list of ready-to-write data buffers.

43. (New) The computer-readable medium of Claim 42, further comprising instructions for performing the steps of:

removing said particular data buffer from said array of available buffers; and

storing on a non-volatile storage unit information contained in said particular data buffer.

44. (New) The computer-readable medium of Claim 36, further comprising instructions for performing the steps of:

maintaining a plurality of data buffers as an array of available buffers; and

in response to determining that no data buffer is available in said array of available buffers for storing said log data, requesting a free data buffer from a global list of free data buffers.

45. (New) A computer system, comprising:

means for reading a buffer index value that identifies a data buffer that was last used for buffering data;

means for incrementing the buffer index value;

means for locating a buffer array entry that is associated with the buffer index value;

means for determining whether the buffer array entry indicates a particular value;

means for attempting to obtain a lock on a particular data buffer that is associated with the buffer array entry in response to a determination that the buffer array entry does not indicate the particular value; and

means for incrementing the buffer index value in response to a determination that the buffer array entry indicates the particular value.